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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/729,252	12/05/2000	Jong Jin Lee	2336-058	4715

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EXAMINER

CHUNG, JASON J

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 12/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/729,252

Applicant(s)

LEE, JONG JIN

Examiner

Jason J. Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admission of prior art in view of Decker (US Patent # 6,009,465).

Regarding claim 1, applicant discloses figures 1 and 2 as prior art and describes the prior art in 1-3 of the specification. The applicant specifically states, "Description of the Prior Art" on page 1, line 14 of the specification. The applicant discloses RF modulation circuit 130 includes a switch 131 turned on/off in response to a switching voltage V_{sw} for passing/blocking the RF signal from the RF input terminal to the RF output terminal (page 2, lines 10-15), which meets the limitations in lines 5-7 of the claim.

The applicant discloses a mixer 133 for mixing the television signal modulated by the modulator 132 with the RF signal passed by the switch 131 and outputting the resulting signal to the connected television via the RF output terminal RF out (page 2, lines 18-22), which meets the limitation in lines 11-15 of the claim.

The applicant discloses a modulator 132 enabled in response to an operating voltage V_{cc} for modulating the audio and video signals AS and VS from the channel demodulator into a television signal (page 2, lines 15-18), but remains silent on a plurality of modulators. The applicant's prior art fails to disclose a plurality of modulators. Decker discloses RF modulators

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operate to provide carrier signals for the video signals that the headend controller routes to the input of the respective modulators (column 4, lines 45-48). Decker discloses each modulator is set to a preselected frequency or channel and each of the remote televisions is assigned to a particular frequency and the channel modulators carry cable television products and alter the frequency positions and scramble the signals by switching the frequencies of the specific video and audio signals (column 4, lines 48-63), which meets the limitation on modulation means enabled in response to operating voltages for modulating input audio signals and video signals into television signals at a plurality of channels respectively and the modulation means includes a plurality of modulators each of the modulators being enabled in response to a corresponding one of the operating voltages to modulate a corresponding one of the input audio signals and corresponding one of video signals into a corresponding one of television signals at the plurality of channels being independent of one another. Additionally, Decker discloses the first combiner 170 combines the signals from various modulators 135 with signals from the preview modulator 160 and the RF control signal and the signals are then combined with cable or satellite television channels using the second combiner 174 (column 5, lines 15-29), which meets the limitation on a mixer for mixing the television signals modulated by the modulation means respectively with the radio frequency signals passed by the switch and outputting the resulting signals respectively to connected televisions via the radio frequency output terminal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify applicant's admission of prior art to have multiple modulators as taught by Decker in order to transmit signals over the cable on different specific carrier frequencies.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify applicant's admission of prior art to have multiple modulators as taught by Decker in order to distribute the workload of modulation among multiple modulators instead of putting the burden on one modulator.


Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason J. Chung whose telephone number is (703) 305-7362. The examiner can normally be reached on M-F, 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

JJC


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600